

**Microwave L1b: Observed minus calculated**

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Notes

All comparisons except fig. 6 are for granule 116 (Europe) on June 14, 2002. West is at the top. Calculations are from Fishbein's simulation. Scan positions 21-30 of AMSU ch. 3-14 are shifted due to a known timing bug. Sidelobe corrections have not been done.

Fig. 1. Window channels. Large differences along coastlines on east side of image caused by timing. Coastline differences on west side of the image may indicate an error in land fraction. Clouds over N.E. Europe and Baltic Sea.

Fig. 2. AMSU ch. 4-8. Ch. 4 and 5 have some sensitivity to the surface. Excess noise in ch. 7 is apparent. North-south gradient of temperature combined with timing shift causes some differences on east side of scan.

Fig. 3. AMSU ch. 9-14. The analysis may not be reliable for the upper stratosphere (ch. 12-14).

Fig. 4. HSB. Low-pressure area over the Baltic Sea.

Fig. 5. Ch. 9 obs-calc vs. scan position. Dither added to scan makes points distinguishable.

Fig. 6. Ch. 9 obs-calc vs. incidence angle for NOAA-15 data from Sept. 1998; sidelobe corrections done here. Calculation from radiosondes yields standard deviation of 0.73 K.

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